

WHAT IS CLAIMED IS:

1. A dynamic imaging server comprising:
 - a parser;
 - a job processor that receives parsed commands from the parser and executes the commands in the form of a job to perform a plurality of operations;
 - at least one image processing engine that performs an operation in response to a command received by the job processor from the parser to process image data ; and
 - a formatter that receives the processed image data and formats the processed image data into a desired format.
2. A dynamic imaging server as claimed in claim 1, further comprising a script execution engine capable of executing code during execution of the job by the job processor.
3. A dynamic imaging system comprising:
 - a storage device;
 - a dynamic imaging server coupled to a storage device;
 - a database accessible by the dynamic imaging server; and
 - a network server.

4. A dynamic imaging system as claimed in claim 3, where the dynamic imaging server comprises:

a parser;

a job processor that receives parsed commands from the parser and executes the commands in the form of a job to perform a plurality of operations;

at least one image processing engine that performs an operation in response to a command received by the job processor from the parser to process image data ; and

a formatter that receives the processed image data and formats the processed image data into a desired format.

5. A dynamic imaging system as claimed in claim 4, wherein the dynamic imaging server further comprises a script execution engine capable of executing code during execution of the job by the job processor.

6. A dynamic imaging system as claimed in claim 3, further comprising a synchronization engine coupled to the storage device.

7. A dynamic imaging system as claimed in claim 3, further comprising a request cache that receives image requests and determines whether the image request should be forwarded to the dynamic imaging server for processing.

8. A dynamic imaging system comprising:

at least one cluster, said cluster including:

at least one cluster master device ; and

at least one cluster slave device;

wherein the cluster master device comprises:

a storage device;

a dynamic imaging server coupled to a storage device;

a database accessible by the dynamic imaging server;

a network server; and

a cluster engine;

wherein the cluster slave device includes:

a storage device;

a dynamic imaging server coupled to a storage device; and

a network server; and

wherein the cluster engine manages a flow of image requests between the cluster master and the cluster slave.

9. A dynamic imaging system as claimed in claim 8, wherein the dynamic imaging server of the cluster master and the dynamic imaging server of the cluster slave each comprise:

a parser;

a job processor that receives parsed commands from the parser and executes the commands in the form of a job to perform a plurality of operations;

at least one image processing engine that performs an operation in response to a command received by the job processor from the parser to process image data ; and a formatter that receives the processed image data and formats the processed image data into a desired format.

10. A dynamic imaging system as claimed in claim 9, wherein the dynamic imaging server of the cluster master and the dynamic imaging server of the cluster slave each further comprise a script execution engine capable of executing code during execution of the job .

11. The dynamic imaging system as claimed in claim 8, further comprising a plurality of said clusters.

12. A method of providing dynamic imaging, said method comprising:
parsing an image request into a job comprising a plurality of commands;
processing the commands to perform a plurality of operations, wherein the operations generate image data that is responsive to the request; and
formatting the image data.

13. A method of providing dynamic imaging, said method comprising:
providing at least one dynamic imaging cluster including at least one cluster master and at least one cluster slave;
analyzing an image request with a cluster engine to select either the cluster master or the cluster slave to process the image request;

processing the image request with either the selected cluster master or the selected cluster slave.

14. A method of providing dynamic imaging as claimed in claim 13, wherein the selected cluster master or the selected cluster slave processes the image request by:

parsing an image request into a job comprising a plurality of commands;
processing the commands to perform a plurality of operations, wherein the operations generate image data that is responsive to the request; and
formatting the image data.

15. A method of providing dynamic imaging, said method comprising:

providing a plurality of dynamic imaging clusters, wherein each dynamic image processing cluster includes at least one cluster master and at least one cluster slave;
analyzing an image request with a cluster engine to select which of the plurality of dynamic image processing clusters will process the request;
forwarding the request to the selected dynamic image processing cluster; and
processing the image request with the selected dynamic imaging processing cluster.

16. A method of providing dynamic imaging as claimed in claim 15, wherein the selected dynamic imaging cluster processes the request by:

providing at least one dynamic image processing cluster including at least one cluster master and at least one cluster slave;

analyzing an image request with a cluster engine to select either the cluster master or the cluster slave to process the image request;

processing the image request with either the selected cluster master or the selected cluster slave.

17. A method of providing dynamic imaging as claimed in claim 16, wherein the selected cluster master or the selected cluster slave processes the image request by:

parsing an image request into a job comprising a plurality of commands;

processing the commands to perform a plurality of operations, wherein the operations generate image data that is responsive to the request; and

formatting the image data.

18. A method of providing dynamic imaging as claimed in claim 15, wherein at last one of the dynamic imaging clusters comprises a user cluster and at least one of the dynamic imaging clusters comprises a third party cluster, and wherein the third party cluster is utilized to provide overflow capacity processing for the user cluster.